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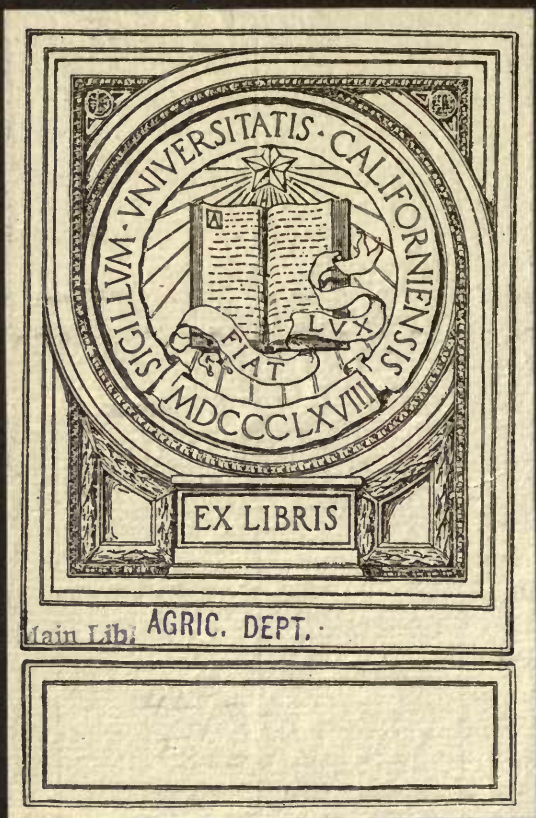
New and Little Known Trees
Suitable for Southern
California Avenues

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New and Little Known Trees Suitable for Southern California Avenues

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SANTA BARBARA, CALIFORNIA

Southern California has started at last to build good roads, and there is no reason whatever why we should not have them as perfect as any in the world, because we are able to employ the best talent and the best materials, while our exceptionally equable climatic conditions are ideal for the maintenance of good roads.

If we need perfect roads we also need them to be beautiful, and it is obvious that more careful attention is going to be bestowed on the selection of trees which will prove best adapted either for ornament or for shade.

Everybody in Southern California is aware of the fact that we are able to draw upon almost any part of the world for ornamental trees, just as we do for all sorts of shrubs and other plants. Consequently, there will be much too many for this especial purpose. In this paper I am going to mention only such trees as have already proven themselves particularly desirable for planting along avenues or roadways of considerable length, and between sixty to one hundred feet wide.

The selection of trees best adapted for planting on streets in the residence sections of our towns is obviously subject to more special requirements and restrictions, and will not be treated in this paper. The question whether in Southern California deciduous trees must entirely be supplanted by evergreens I am not going to discuss, believing that either one class or the other might be preferable under different conditions.

As I understand it, the beauty of an avenue of trees resides principally in their uniform growth and in each individual tree being allowed to display its particular character and features, and not to become entangled with its neighbors.

Along such avenues, sixty to one hundred feet wide, and which, very likely, will not have cemented or asphalted sidewalks, trees which will eventually attain sixty to one hundred feet in height will not be objectionable, even if they grow a very big trunk.

Native Evergreen Trees

The following California native trees have already been planted on a more or less extensive scale and are sure to prove satisfactory:

Prunus integrifolia, "Island Cherry," "Islay," by some botanists considered to be only a form of the "mountain" or "wild cherry," but a native (exclusively) of Santa Cruz, Santa Rosa and Santa Catalina islands. Of rapid and pyramidal growth, the glossy foliage much varying in shape and size, but never holly-like. Will thrive in almost any kind of soil, and stand well heavy winds. May attain sixty to eighty feet; should be planted twenty-five to fifty feet apart.

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Quercus agrifolia, the common "California Live Oak," will grow fast enough in tolerably good soil, and with plenty of moisture at the roots; in poor and dry soil will develop slower but will attain large size and a great age, as shown by the huge trees among the sandstone boulders on the ridge at Montarioso. May attain sixty feet, or over; being of spreading habit, should be planted not less than forty feet apart.

Quercus chrysolepis, "Golden-leaf Oak," "Canyon Live Oak," generally found higher up in the mountains than the preceding, and attaining about same size, but not such a fast grower.

Lyonothamnus floribundus var. *asplenifolius*, "Palo Fierro" or "Ironwood" of Santa Cruz and Santa Rosa islands; of regularly pyramidal shape, very conspicuous for its aromatic, fern-like foliage, and large umbels of white, strong scented flowers. May attain fifty feet and over, should be planted twenty or twenty-five feet apart.

Umbellularia californica, "Native Bay" or "Laurel," of dense, columnar growth, quite heavily foliated, the strong scented, deep green leaves persisting for several years. Will not succeed far from water, may attain sixty to eighty feet, and occasionally much more, like the gigantic specimen at Cathedral Oaks, five miles north of Santa Barbara. Should be planted twenty-five or thirty feet apart.

Chamaecyparis lawsoniana, "Lawson Cypress." Surely one of the most desirable among conifers, on account of its feathery branches and pleasant green color. Will succeed even in poor soil and with little moisture, but much better under more favorable conditions. To retain its full beauty, not unlike most other conifers, its lower branches ought to be allowed to droop to the ground, and therefore it should not be planted at less than forty feet. There is no doubt that the most picturesque effect will be obtained if conifers are used only on sloping ground, in which position they will also thrive much better.

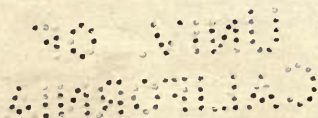
Libocedrus decurrens, "Incense Cedar," another very tall native conifer, more columnar in habit than the preceding, and not such a fast grower. Could be planted twenty-five to thirty feet apart. Not of feathery effect, but the emerald green of its foliage is very attractive.

Exotic Evergreen Trees

A certain number of conifers belong to this section, which have been planted more or less in our gardens and parks, but hardly at all for avenues.

Araucaria excelsa, the "Norfolk Island Pine" or "Star Pine," leads the list for its wonderful beauty and fast growth. I do not know of any other tree, no matter from whatever country, possessing such a distinctiveness of character, and such a solemnity of outline. But it could not be used for avenues under one hundred feet wide, and should be planted from sixty to eighty feet apart. It is not at all particular about soil, as shown in Santa Barbara where most numerous and most beautiful specimens are growing, both in the rich moist soil down town and on the dry hard-pan in the upper part of town.

Araucaria bidwillii, the "Bunya-bunya" of Queensland, will, at least in this country, grow not as tall and much slower than the preceding, and it appears to need also deeper soil and more moisture. But it is most impressive for its dense



pyramids of a dark green color. Should be planted not less than fifty feet apart.

Cunninghamia sinensis, from China, offers about the same outline as *A. bidwillii*, but with branches more drooping, the foliage of distinctly glaucous color. It will stand more cold and more heat, but needs deep soil and plenty of moisture at the roots, otherwise losing its lower branches and looking very unsightly. The finest specimens that I know of are at the Tevis place near Bakersfield, where the range of temperature is pretty wide, but soil is deep and moist. Plant fifty feet apart.

Cedrus deodara, or "Himalayan Cedar," is well known in gardens, but has never been much used as an avenue tree. I know only of the Santa Rosa avenue in Altadena, which is certainly very striking, but the effect is spoiled by the avenue not being wide enough and by the trees having been set much too close together. It should not be less than forty feet.

Cupressus sempervirens, the "Italian" or "Oriental Cypress," has been, of late much used (and abused) in California gardens. It is sure to make splendid avenues, like those of the most ancient and more beautiful villas in Italy, but one must not forget that in rich soil and with plenty of moisture, it is sure to lose its character and "to grow fat," its lateral branches spreading out under the overweight of foliage; also that the full effect of a cypress avenue cannot be obtained in only a few years. The spreading form of the Italian cypress, much despised in California, will make splendid trees, even in the poorest soil, having the same outline and offering the same scenic effect as firs and spruces, which are an impossibility here. If planted in rich and moist soil *Cupressus horizontalis* will be at its best, displaying more fully its above mentioned character. The "columnar" form can be planted as close as sixteen or twenty feet, the "spreading" one will require at least twice as much.

Cupressus guadalupensis, "Blue Cypress" of Guadalupe island, not over seventy feet in height, and normally of a peculiar "ovoidal" outline, at least up to a certain age. Particularly recommendable for dry, rocky locations, growing naturally upon disintegrated lava currents. Quite "blue" in the young age, and its bark peeling off, just like cherry trees and *Araucaria cunninghamii*. With age it is much liable to vary, both in color and in outline, as I had the opportunity of remarking when in Guadalupe island many years ago. Plant from twenty-five to forty feet apart.

Cupressus arizonica, (Figure 80), from the mountains in northern Arizona, will retain its silvery color, better than the preceding. It will grow not quite as tall and will spread more at the base, while it will stand much more cold and any amount of drought. Plant from thirty to forty feet apart.

Australian Eucalyptus are recommendable for avenues, including the common *E. globulus*, "Blue Gum," which to this date has been used along roadways, probably more extensively than any other tree but rather as a most effective wind-break than for beautifying the same. The following kinds appear to be more particularly recommendable for avenues:

Eucalyptus citriodora, "Lemon-scented Gum," quite unique for its smooth, ivory white, tapering trunk, rising to one hundred and fifty feet, and for its

comparatively small but very regular crown, from which such delicious perfume exhales in foggy weather. Should be planted thirty to forty feet apart.

Eucalyptus rostrata, "Red Gum," almost as fast a grower as the "Blue Gum," and having the advantage of standing more cold in the young stage, and of being more graceful in shape and more uniform when full grown. Plant about forty feet apart.



Figure 80. *Cupressus arizonica* on its dry native heath.

Eucalyptus cornuta, "Yate," up to eighty feet high; highly recommendable not only for its standing saline and alkaline soil better than any other, but also for the very peculiar shining and plummy effect of its foliage. Should be planted at about forty feet apart.

Eucalyptus botryoides, "Bastard Mahogany, up to one hundred feet; a handsome, symmetrically shaped tree, standing drought well. Plant at forty feet.

Eucalyptus saligna, "Grey Gum," up to one hundred feet, of weeping effect like the "weeping willow," leaves also willow shaped. Plant at about forty feet.

There are also a number of species of *Ficus*, "rubber trees," from different countries which are particularly suitable for wide avenues.

Ficus macrophylla, "Moreton Bay Fig," is the most widely known, and it makes a magnificent tree, as one can judge from the few large specimens which escaped destruction during the wonderful extension of building in our Southern California cities. This should not be spaced under seventy-five to eighty feet, and it should be excluded from locations subject to heavy winds which may break too easily its heavily laden limbs.

Ficus rubiginosa or *australis*, also from Australia, will grow not as large. It has also smaller leaves, and it will stand more cold; will also stand the wind much better. Plant from forty to fifty feet apart.

Ficus bellingeri, from Queensland, appears to be a decided improvement on the preceding, but there are no large enough specimens as yet to form a positive judgment.

Ficus retusa, from India and Southern China (synonym *F. nitida*), is probably the species which has gained the widest reputation as an avenue tree. Much planted at Hongkong, in Algeria and in Sicily; there used to be some fine specimens in the center of Los Angeles, which had to give room to sky scrapers. It appears not to grow as fast as *F. macrophylla*; its foliage is thick and somewhat in the shape of the "strawberry guava." It will need good soil, plenty of moisture and plenty of heat to develop in the proper way. Plant at about forty feet apart.

Hymenosporum flavum, Queensland, up to one hundred feet; related to the *Pittosporums*, but finer than any of them. Fast and pyramidal growing, its branches slightly drooping and laden in spring with a profusion of jasmine shaped and jasmine scented, yellow flowers. Not at all particular about quality of soil, but not recommended for very dry places. Plant at thirty or forty feet apart.

Pittosporum rhombifolium, Queensland, up to eighty feet high; probably the tallest and the handsomest of all kinds introduced so far, not only for its very regular pyramidal shape, and peculiar foliage, but also for the great profusion of its yellowish white, fragrant flowers in summer, and of its shining bright yellow berries which persist almost all winter. Plant at thirty or forty feet apart.

Quercus suber, the "cork oak" of the Mediterranean basin. It has about the general outline of our native live oak, but will make faster growth, and is also interesting for its bark. Plant forty feet apart.

Sterculia gregori, (Figure 81), from Western Australia; the very best of all kinds of *Sterculia* or *Brachychiton*, "bottle trees," "flame trees," introduced so far, the finest specimen to be seen at Alhambra. Clothed down to the ground with glossy, coriaceous foliage which persists for many years, and sets out well the heavy bunches of salmon colored flowers which are produced for several months. May attain one hundred feet in height. Plant at forty or fifty feet.

Pircunia dioica, Argentina, the "Ombu" of the Pampas, "Bella Sombra" of the Spaniards who introduced it to Europe. In good soil will beat almost all other trees for quick growth and for beautiful shade, but will also stand drought won-

derfully well. It will in time build huge buttresses at the base, like those of many species of tropical *Ficus*. Should be planted about fifty feet apart.

Tipuana speciosa, Argentina, there called "Tipa," and considered one of the finest among native trees. May attain one hundred feet, and builds a straight

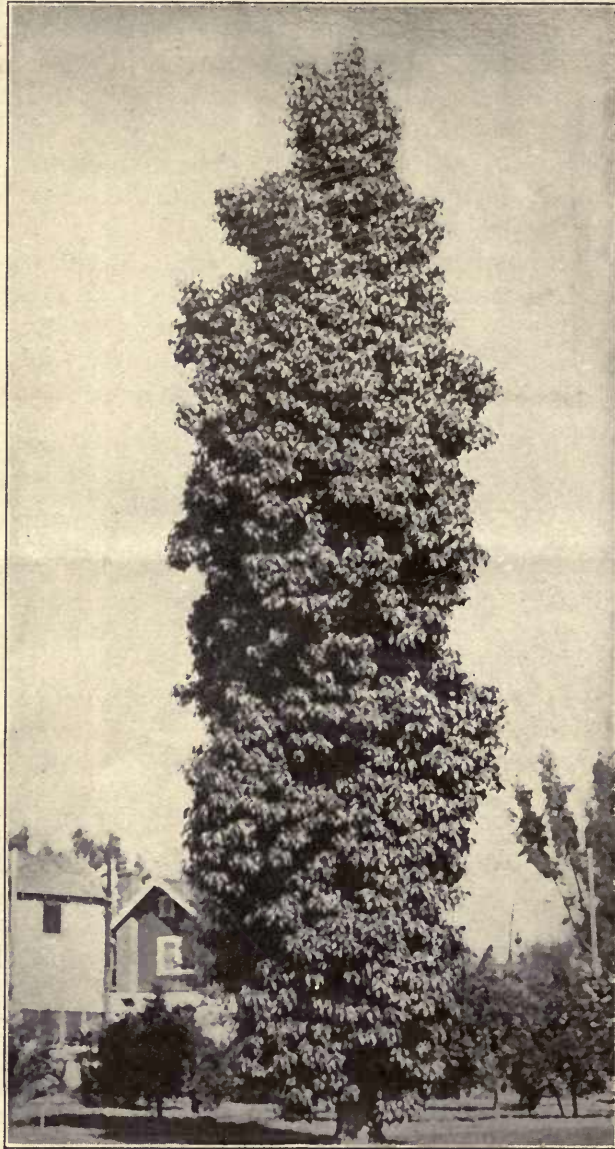


Figure 81. *Sterculia gregori* at Alhambra, California.

trunk, crowned by feathery foliage of light green color and drooping bunches of yellow flowers. Plant about forty feet apart.

Dendrocalamus latiflorus, from the island of Formosa, "upright giant bamboo." For low lands, and even where moisture might be excessive for other trees, clumps of this giant bamboo will make magnificent avenues, in the same way as they will make the most efficient wind breaks (if planted closer together). Does well also on drier ground, as can be seen in Montecito, etc. For avenues should be planted thirty to fifty feet apart.

Deciduous Trees

Acer macrophyllum, California. This has broader leaves than any other kind of maples that are found scattered on the northern hemisphere, and it is certainly one of the finest. In order to grow well and to retain its foliage until late it will need plenty of moisture at the roots, as otherwise the leaves will begin to drop in August or earlier. Same remark applies to other deciduous trees. This grows up



Figure 82. *Cedrela fissilis* planted in 1897.

to eighty feet, and should be planted thirty to forty feet apart.

Quercus lobata, California, "Valley Oak," "Roble" of the native Californians. In deep soil and with plenty of moisture this makes a truly magnificent, widely spreading tree, but could not be used under different conditions. May attain sixty or eighty feet; should be planted eighty to one hundred feet apart.

Platanus racemosa, native "Plane" or "Sycamore." While the oldest trees are often distorted in the most extraordinary ways, young trees can be easily trained to any desired shape, and this kind has a beauty of its own unrivalled by other deciduous trees. It may attain sixty feet or more, and should be set at least thirty feet apart.

Fraxinus velutina, "Arizona Ash." Grows fast and very symmetrical in shape, with branches gracefully drooping, and it has the great merit of growing well in alkaline soil where hardly any other tree will do. Grows up to sixty feet or more. Should be planted thirty to forty feet apart.

Cedrela fissilis, (Figure 82), Paraguay and Brazil, "Brazilian cedar wood." For avenues where not much shade is required this is sure to be a first class deciduous tree, its trunk rising up straight to a considerable height without branching, the branches never very heavy and forming a symmetrical head. Finest specimen to be seen in my old garden on State street in Santa Barbara which I planted in 1897, and must be now about sixty feet high. Timber is also very valuable, much like "Cuban" or "Spanish Cedar," *Cedrela odorata*. Should be planted thirty to forty feet apart.

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